



AMENDMENTS TO THE SPECIFICATION

Please add the following sequence listing as required under 37 C.F.R. 1.822 to

1.825.

SEQUENCE LISTING

<110> The University of Hong Kong
Ng, Hon Mun

<120> Novel HEV Antigenic Peptide and Methods

<130> 8737-000010

<140> US 10/089,292

<141> 2002-08-28

<150> PCT/IB00/01393

<151> 2000-09-28

<150> CA 2,283,538

<151> 1999-09-30

<160> 17

<170> PatentIn version 3.3

<210> 1

<211> 642

<212> DNA

<213> Hepatitis E virus

<220>

<221> CDS

<222> (1)..(642)

<400> 1

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1				5					10					15		
ggt	aag	ctt	tat	aca	tct	gta	gag	aat	gct	cag	cag	gat	aag	ggt	att	96
Val	Lys	Leu	Tyr	Thr	Ser	Val	Glu	Asn	Ala	Gln	Gln	Asp	Lys	Gly	Ile	
			20					25					30			
gca	atc	ccg	cat	gac	atc	gac	ctc	ggg	gag	tct	cgt	gta	gtt	att	cag	144
Ala	Ile	Pro	His	Asp	Ile	Asp	Leu	Gly	Glu	Ser	Arg	Val	Val	Ile	Gln	
			35				40					45				
gat	tat	gac	aac	caa	cat	gag	cag	gac	cga	ccg	aca	cct	tcc	cca	gcc	192
Asp	Tyr	Asp	Asn	Gln	His	Glu	Gln	Asp	Arg	Pro	Thr	Pro	Ser	Pro	Ala	
			50				55				60					

cca tcg cgc cct ttt tct gtc ctc cga gct aat gat gtg ctt tgg ctt	240
Pro Ser Arg Pro Phe Ser Val Leu Arg Ala Asn Asp Val Leu Trp Leu	
65 70 75 80	
tct ctc acc gct gcc gag tat gac cag tcc act tac ggc tct tcg acc	288
Ser Leu Thr Ala Ala Glu Tyr Asp Gln Ser Thr Tyr Gly Ser Ser Thr	
85 90 95	
ggc cca gtc tat gtc tct gac tct gtg acc ttg gtt aat gtt gcg acc	336
Gly Pro Val Tyr Val Ser Asp Ser Val Thr Leu Val Asn Val Ala Thr	
100 105 110	
ggc gcg cag gcc gtt gcc cgg tca ctc gac tgg acc aag gtc aca ctt	384
Gly Ala Gln Ala Val Ala Arg Ser Leu Asp Trp Thr Lys Val Thr Leu	
115 120 125	
gat ggt cgc ccc ctt tcc acc atc cag cag tat tca aag acc ttc ttt	432
Asp Gly Arg Pro Leu Ser Thr Ile Gln Gln Tyr Ser Lys Thr Phe Phe	
130 135 140	
gtc ctg ccg ctc cgc ggt aag ctc tcc ttt tgg gag gca ggt act act	480
Val Leu Pro Leu Arg Gly Lys Leu Ser Phe Trp Glu Ala Gly Thr Thr	
145 150 155 160	
aaa gcc ggg tac cct tat aat tat aac acc act gct agt gac caa ctg	528
Lys Ala Gly Tyr Pro Tyr Asn Tyr Asn Thr Thr Ala Ser Asp Gln Leu	
165 170 175	
ctc gtt gag aat gcc gct ggg cat cgg gtt gct att tcc act tac acc	576
Leu Val Glu Asn Ala Ala Gly His Arg Val Ala Ile Ser Thr Tyr Thr	
180 185 190	
act agc ctg ggt gct ggt ccc gtc tct att tcc gcg gtt gct gtt tta	624
Thr Ser Leu Gly Ala Gly Pro Val Ser Ile Ser Ala Val Ala Val Leu	
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gcc ccc cct ccg cgc tag	642
Ala Pro Pro Pro Arg	
210	

<210> 2
 <211> 213
 <212> PRT
 <213> Hepatitis E virus

<400> 2

Gln Leu Phe Tyr Ser Arg Pro Val Val Ser Ala Asn Gly Glu Pro Thr
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Val Lys Leu Tyr Thr Ser Val Glu Asn Ala Gln Gln Asp Lys Gly Ile
20 25 30

Ala Ile Pro His Asp Ile Asp Leu Gly Glu Ser Arg Val Val Ile Gln

35

40

45

Asp Tyr Asp Asn Gln His Glu Gln Asp Arg Pro Thr Pro Ser Pro Ala
 50 55 60

Pro Ser Arg Pro Phe Ser Val Leu Arg Ala Asn Asp Val Leu Trp Leu
 65 70 75 80

Ser Leu Thr Ala Ala Glu Tyr Asp Gln Ser Thr Tyr Gly Ser Ser Thr
 85 90 95

Gly Pro Val Tyr Val Ser Asp Ser Val Thr Leu Val Asn Val Ala Thr
 100 105 110

Gly Ala Gln Ala Val Ala Arg Ser Leu Asp Trp Thr Lys Val Thr Leu
 115 120 125

Asp Gly Arg Pro Leu Ser Thr Ile Gln Gln Tyr Ser Lys Thr Phe Phe
 130 135 140

Val Leu Pro Leu Arg Gly Lys Leu Ser Phe Trp Glu Ala Gly Thr Thr
 145 150 155 160

Lys Ala Gly Tyr Pro Tyr Asn Tyr Asn Thr Thr Ala Ser Asp Gln Leu
 165 170 175

Leu Val Glu Asn Ala Ala Gly His Arg Val Ala Ile Ser Thr Tyr Thr
 180 185 190

Thr Ser Leu Gly Ala Gly Pro Val Ser Ile Ser Ala Val Ala Val Leu
 195 200 205

Ala Pro Pro Pro Arg
 210

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 <213> Artificial

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34

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<211> 2054

<212> DNA

<213> Hepatitis E virus

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cgaccactcg gctccgcttg gcgtgaccag gccagcgcc ccgccgttgc ctacgctcgt	300
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ccagtgcctg atgttgactc ccgcgggcgcc atcctgcgcc ggcagtataa cctatcaaca	420
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gactttgccc tcgaacttga gttccgcaac ctacccccg gtaataccaa cacgcggtc	960
tccggttact ccagcactgc ccgtcaccgc ctctcgcgc gtgcagatgg gactgccgag	1020
cttaccacca cggctgctac ccgcttcatg aaggacctct attttactag tactaatggt	1080
gtcggtgaga tcggccgtgg gatagcgctt accctgttta accttgctga caccctgctt	1140
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gaccagtcca cttacggctc ttcgaccggc ccagtctatg tctctgactc tgtgaccttg	1500
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cttgatggtc gccccctttc caccatcaag cagtattcaa agaccttctt tgtcctgccg	1620
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ttagcccccc actccgcgct agcattgctt gaggatacca tggactaccc tgcccgcgcc	1860
catactttcg atgacttctg cccggagtgc cggccccctg gcctccaggg ctgtgctttt	1920
cagtctactg tcgctgagct tcagcgcctt aagatgaagg tgggtaaaac tcgggagtta	1980
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<210> 5
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 <212> DNA
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ccgccgtcgt gggcgggcga gcggcggttc cggcggtggt ttctgggggtg accgggttga	180
ttctcagccc ttcgcaatcc cctatattca tccaaccaac cccttcgccc cgatgtcacc	240
gctgcggccg gggctggacc tcgtgttcgc caaccgccc gaccactcgg ctccgcttgg	300
cgtgaccagg cccagcgccc cgccgttgcc tcacgtcgta gacctaccac agctggggcc	360
gcgccgctaa	370

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 <211> 114
 <212> DNA
 <213> Hepatitis E virus

<220>
 <221> CDS
 <222> (1)..(114)

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acc agg ccc agc gcc ccg ccg ttg cct cac gtc gta gac cta cca cag				96
Thr Arg Pro Ser Ala Pro Pro Leu Pro His Val Val Asp Leu Pro Gln				
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ctg ggg ccg cgc cgc taa				114
Leu Gly Pro Arg Arg				
	35			
<210> 7				
<211> 37				
<212> PRT				
<213> Hepatitis E virus				
<400> 7				
Asp Leu Val Phe Ala Asn Pro Pro Asp His Ser Ala Pro Leu Gly Val				
1	5	10	15	
Thr Arg Pro Ser Ala Pro Pro Leu Pro His Val Val Asp Leu Pro Gln				
	20	25	30	
Leu Gly Pro Arg Arg				
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aagcaaataa actataactc ccga				24
<210> 10				
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<213> Artificial
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 <210> 11
 <211> 30
 <212> DNA
 <213> Artificial
 <220>
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 <211> 30
 <212> DNA
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 <223> Cloning Primer ORF3F
 <400> 12
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 <212> DNA
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 <220>
 <223> Cloning Primer ORF3R
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 <400> 14
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<210> 15
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 <400> 15
 ctttgatgac accgtcttct cg 22

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 <400> 16
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<210> 17
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 <400> 17
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<210> 18
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 <400> 18

Gln Leu Phe Tyr Ser Arg Pro Val Val Ser Ala Asn Gly Glu Pro Thr
 1 5 10 15

Val Lys Leu Tyr Thr Ser Val Glu Asn Ala Gln Gln Asp Lys Gly Ile
 20 25 30

Ala Ile Pro His Asp Ile Asp Leu Gly Glu Ser Arg Val Val Ile Gln
 35 40 45

Asp Tyr Asp Asn Gln His Glu Gln Asp Arg Pro Thr Pro Ser Pro Ala

50		55		60
Pro Ser Arg Pro Phe Ser Val Leu Arg Ala Asn Asp Val Leu Trp Leu				
65		70		75 80
Ser Leu Thr Ala Ala Glu Tyr Asp Gln Ser Thr Tyr Gly Ser Ser Thr				
	85		90	95
Gly Pro Val Tyr Val Ser Asp Ser Val Thr Leu Val Asn Val Ala Thr				
	100		105	110
Gly Ala Gln Ala Val Ala Arg Ser Leu Asp Trp Thr Lys Val Thr Leu				
	115		120	125
Asp Gly Arg Pro Leu Ser Thr Ile Gln Gln Tyr Ser Lys Thr Phe Phe				
	130		135	140
Val Leu Pro Leu Arg Gly Lys Leu Ser Phe Trp Glu Ala Gly Thr Thr				
	145		150	155 160
Lys Ala Gly Tyr Pro Tyr Asn Tyr Asn Thr Thr Ala Ser Asp Gln Leu				
	165		170	175
Leu Val Glu Asn Ala Ala Gly His Arg Val Ala Ile Ser Thr Tyr Thr				
	180		185	190
Thr Ser Leu Gly Ala Gly Pro Val Ser Ile Ser Ala Val Ala Val Leu				
	195		200	205
Ala Pro Pro Pro Arg				
	210			